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PUBLICATIONS

NIST Special Publication 881-82



Federal Implementation Guideline for Electronic Data Interchange

**ASC X12 003040 Transaction Set 852
Product Activity Data
(Revision 1)**

Implementation Convention

NIST

U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Institute of
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¹At Boulder, CO 80303.

²Some elements at Boulder, CO.

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Electronic Commerce Acquisition Program Management Office
Standard Management Committee - Secretariat
National Institute of Standards and Technology
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852 Product Activity Data

Functional Group ID=PD

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Activity Data Transaction Set (852) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used by a distributor, warehouse, or retailer to advise a trading partner of inventory, sales, and other product activity information. Product activity data enables a trading partner to plan and ship, or propose inventory replenishment quantities, for distribution centers, warehouses or retail outlets. The receiver of the transaction set will maintain some type of inventory/product movement records for its trading partners to enable replenishment calculations based on data provided by the distributor, warehouse or retailer.

Notes:

1. Organizations use this transaction set to provide asset balance and point of sale information to vendors responsible for replenishing distribution centers, warehouses or retail outlets.

2. Use a single occurrence of this transaction set to report asset balance and point of sale information to a single vendor for a single distribution center, warehouse or retail outlet.

Heading:

Pos. <u>No.</u>	Seg. <u>ID</u>	Name	Req. <u>Des.</u>	Max.Use	Loop Repeat	Notes and Comments
Must Use 010	ST	Transaction Set Header	M	1		
Must Use 020	XQ	Reporting Date/Action	M	1		
Must Use 030	XPO	Preassigned Purchase Order Numbers	O	>1		
Not Used 040	N9	Reference Number	O	>1		
Not Used 050	PER	Administrative Communications Contact	O	3		
		LOOP ID - N1			200	
060	N1	Name	O	1		n1
Not Used 070	N2	Additional Name Information	O	1		
Not Used 080	N3	Address Information	O	2		
Not Used 090	N4	Geographic Location	O	1		
Not Used 100	FOB	F.O.B. Related Instructions	O	1		
Not Used 110	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1		
Not Used 120	DTM	Date/Time/Period	O	>1		
Not Used 130	N9	Reference Number	O	>1		
Not Used 140	PER	Administrative Communications Contact	O	3		

Detail:

Pos. <u>No.</u>	Seg. <u>ID</u>	Name	Req. <u>Des.</u>	Max.Use	Loop Repeat	Notes and Comments
		LOOP ID - LIN			999999	
Must Use 150	LIN	Item Identification	O	1		
Not Used 160	CTP	Pricing Information	O	25		
Not Used 170	PO4	Item Physical Details	O	1		
Not Used 171	N9	Reference Number	O	>1		

Not Used	175	AMT	Monetary Amount	O	10	
			LOOP ID - ZA			99
Must Use	180	ZA	Product Activity Reporting	M	1	n2
Not Used	190	CTP	Pricing Information	O	25	
Not Used	200	SDQ	Destination Quantity	O	>1	

Summary:

	<u>Pos.</u>	<u>Seg.</u>	<u>Name</u>	<u>Req.</u>	<u>Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	210	CTT	Transaction Totals	O		1		n3
Must Use	220	SE	Transaction Set Trailer	M		1		

Transaction Set Notes

1. The reporting location is required. The reporting location is specified explicitly in the N1 segment using the code RL in N101, or implicitly using the SDQ segment (Table 2) with the location data elements. They are mutually exclusive (the SDQ and the N1 with N101 containing RL).
2. The quantity for the item identified in the LIN segment is required. Quantity is specified either in the ZA segment (ZA02) or in the SDQ segment, but not in both.
3. The number of line items (CTT01) is the accumulation of the number of LIN segments. Hash total (CTT02) is not used in this transaction set.
When sending item and activity data in the LIN loop, the CTT segment is required.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:

Data Element Summary					
	<u>Ref.</u>	<u>Data Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	Code uniquely identifying a Transaction Set	M ID 3/3
			852	X12.52 Product Activity Data	
Must Use	ST02	329	Transaction Set Control Number	Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

Segment: **XQ** Reporting Date/Action
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To specify reporting date and action to be taken
Syntax Notes:
Semantic Notes: 1 XQ02 is the reporting date. If reporting a date range, then XQ02 is the start date and XQ03 is the end date.
Comments:

Data Element Summary					
	<u>Ref.</u>	<u>Data</u>	<u>Name</u>		<u>Attributes</u>
Must Use	Des.	Element	Name		
	XQ01	305	Transaction Handling Code Code designating the action to be taken by all parties		M ID 1/1
			F Plan and Submit Suggested Purchase Order(s)		
			G Plan Order(s) and Ship Product		
			H Notification Only		
Must Use	XQ02	373	Date Date (YYMMDD)		M DT 6/6
Not Used	XQ03	373	Date Date (YYMMDD)		O DT 6/6

Segment: **XPO** Preassigned Purchase Order Numbers
Position: 030
Loop:
Level: Heading
Usage: Optional (Must Use)
Max Use: >1
Purpose: To transmit preassigned purchase order numbers
Syntax Notes: 1 If either XPO03 or XPO04 is present, then the other is required.
Semantic Notes: 1 XPO01 is the preassigned purchase order number. If a range of purchase order numbers is to be transmitted, use XPO01 for the first number and XPO02 as the ending number.
Comments: 1 XPO03 and XPO04 specify the location that the purchase order numbers apply to.

Data Element Summary					
	<u>Ref.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
Must Use	XPO01	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser <i>Agency preassigned purchase order number. There will be a separate purchase order number for each warehouse receiving location.</i>	M	AN 1/22
Not Used	XPO02	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser	O	AN 1/22
Not Used	XPO03	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	X	ID 1/2
Not Used	XPO04	67	Identification Code Code identifying a party or other code	X	AN 2/17

Segment:	N1 Name		
Position:	060		
Loop:	N1	Optional	
Level:	Heading		
Usage:	Optional		
Max Use:	1		
Purpose:	To identify a party by type of organization, name, and code		
Syntax Notes:	<p>1 At least one of N102 or N103 is required.</p> <p>2 If either N103 or N104 is present, then the other is required.</p>		
Semantic Notes:			
Comments:	<p>1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.</p> <p>2 N105 and N106 further define the type of entity in N101.</p>		

Data Element Summary					
	<u>Ref.</u>	<u>Data Element</u>	<u>Name</u>		<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code		M ID 2/2
			Code identifying an organizational entity, a physical location, or an individual		
			RL Reporting Location		
Not Used	N102	93	Name		X AN 1/35
			Free-form name		
Must Use	N103	66	Identification Code Qualifier		X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			1 D-U-N-S Number, Dun & Bradstreet		
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
			10 Department of Defense Activity Address Code (DODAAC)		
			54 Warehouse		
			M4 Department of Defense Routing Identifier Code (RIC)		
			An integral and predetermined participant in an established logistical system performing general logistic control, distribution, and storage functions		
Must Use	N104	67	Identification Code		X AN 2/17
			Code identifying a party or other code		
			<i>Enter the code applicable to the warehouse reporting location.</i>		
Not Used	N105	706	Entity Relationship Code		O ID 2/2
			Code describing entity relationship		
Not Used	N106	98	Entity Identifier Code		O ID 2/2
			Code identifying an organizational entity, a physical location, or an individual		

Segment:	LIN Item Identification		
Position:	150		
Loop:	LIN Optional (Must Use)		
Level:	Detail		
Usage:	Optional (Must Use)		
Max Use:	1		
Purpose:	To specify basic item identification data		
Syntax Notes:	1 If LIN04 is present, then LIN05 is required. 2 If LIN06 is present, then LIN07 is required. 3 If LIN08 is present, then LIN09 is required. 4 If LIN10 is present, then LIN11 is required. 5 If LIN12 is present, then LIN13 is required. 6 If LIN14 is present, then LIN15 is required. 7 If LIN16 is present, then LIN17 is required. 8 If LIN18 is present, then LIN19 is required. 9 If LIN20 is present, then LIN21 is required. 10 If LIN22 is present, then LIN23 is required. 11 If LIN24 is present, then LIN25 is required. 12 If LIN26 is present, then LIN27 is required. 13 If LIN28 is present, then LIN29 is required. 14 If LIN30 is present, then LIN31 is required. 1 LIN01 is the line item identification 1 See the Data Dictionary for a complete list of ID's. 2 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.		
Semantic Notes:			
Comments:			

Data Element Summary					
		<u>Ref.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01		350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set <i>Enter Agency unique system assigned number.</i>	O AN 1/11
Must Use	LIN02		235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) FS National Stock Number SK Stock Keeping Unit (SKU) UA U.P.C./EAN Case Code (2-5-5) UD U.P.C./EAN Consumer Package Code (2-5-5) UI U.P.C. Consumer Package Code (1-5-5)	M ID 2/2
Must Use	LIN03		234	Product/Service ID Identifying number for a product or service <i>Enter the code of the product whose activity is being reported.</i>	M AN 1/30
Not Used	LIN04		235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O ID 2/2
Not Used	LIN05		234	Product/Service ID Identifying number for a product or service	X AN 1/30
Not Used	LIN06		235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O ID 2/2
Not Used	LIN07		234	Product/Service ID Identifying number for a product or service	X AN 1/30

Not Used	LIN08	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN09	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN10	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN11	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN12	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN13	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN14	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN15	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN16	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN17	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN18	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN19	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN20	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN21	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN22	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN23	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN24	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN25	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN26	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN27	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN28	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID 2/2
Not Used	LIN29	234	Product/Service ID Identifying number for a product or service	X	AN 1/30
Not Used	LIN30	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in	O	ID 2/2

Not Used

LIN31

234

Product/Service ID (234)

Product/Service ID

Identifying number for a product or service

X AN 1/30

Segment: **ZA** Product Activity Reporting
Position: 180
Loop: ZA Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To provide activity details concerning product being reported
Syntax Notes:
Comments:

- 1 If either ZA02 or ZA03 is present, then the other is required.
- 2 If either ZA04 or ZA05 is present, then the other is required.
- 3 If either ZA06 or ZA07 is present, then the other is required.

Data Element Summary					
	Ref. <u>Des.</u>	Data Element	Name	<u>Attributes</u>	
Must Use	ZA01	859	Activity Code Code identifying activity details for the product being reported <i>Enter QA in first iteration of ZA loop. Enter QS in second iteration of ZA loop. Enter QL if required in third iteration of ZA loop. Enter QM if required in fourth iteration of ZA loop. QL/QM entries specify the quantity range vendor is required to maintain.</i>	M	ID 2/2
			QA Current Inventory Quantity Available for Shipment or Sale Indicates the quantity currently available to be sold or shipped QL Minimum Inventory Quantity The minimum inventory quantity for replenishment purposes QM Maximum Inventory Quantity The maximum inventory quantity for replenishment purposes QS Quantity Sold		
Must Use	ZA02	380	Quantity Numeric value of quantity <i>Enter Quantity applicable to QA/QS/QL/QM.</i>	X	R 1/15
Must Use	ZA03	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken <i>Enter unit of issue for item being reported.</i> Refer to 003040 Data Element Dictionary for acceptable code values.	X	ID 2/2
Not Used	ZA04	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	X	ID 3/3
Not Used	ZA05	373	Date Date (YYMMDD)	X	DT 6/6
Not Used	ZA06	128	Reference Number Qualifier Code qualifying the Reference Number.	X	ID 2/2
Not Used	ZA07	127	Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	X	AN 1/30

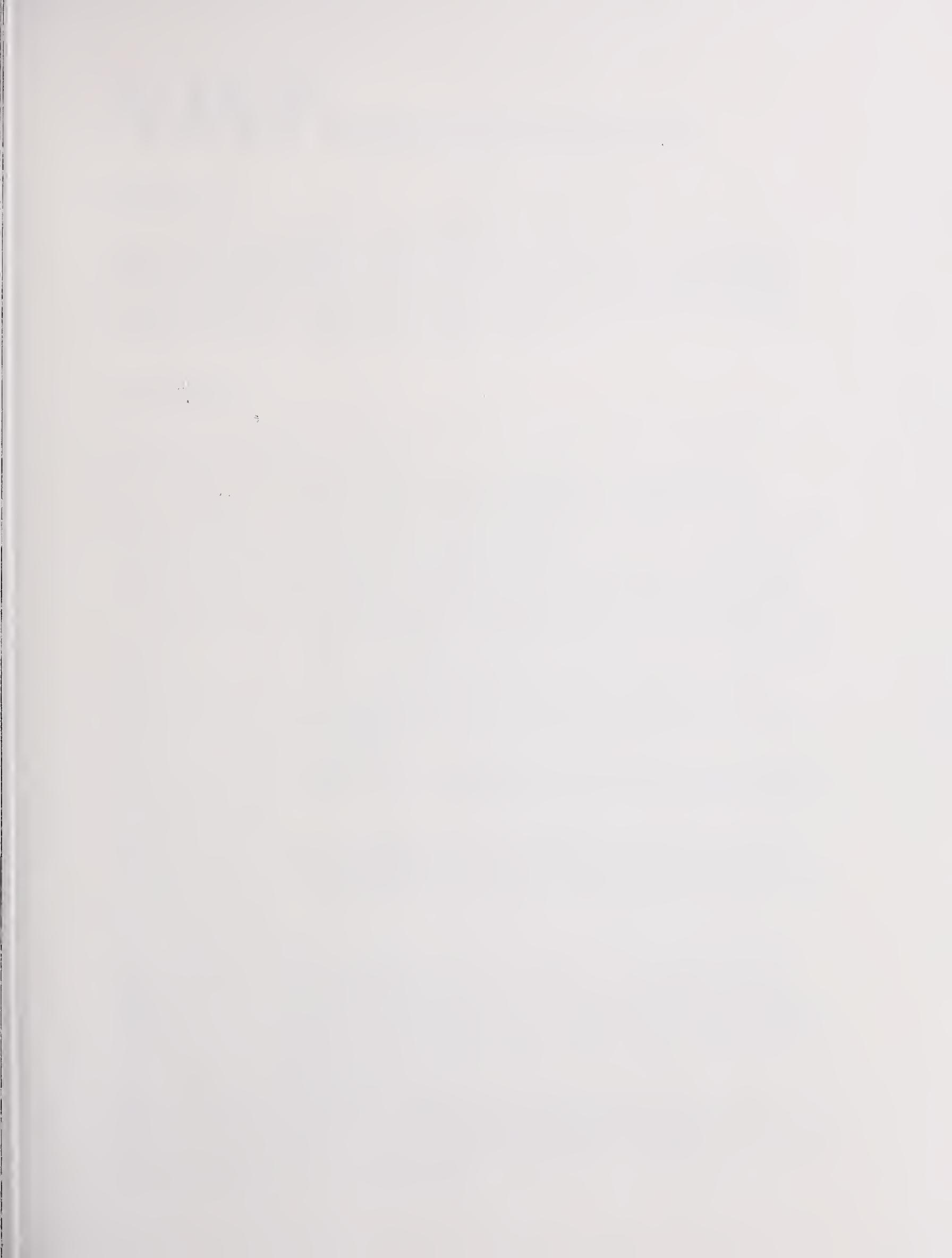
Segment:	CTT Transaction Totals		
Position:	210		
Loop:			
Level:		Summary	
Usage:		Optional (Must Use)	
Max Use:	1		
Purpose:		To transmit a hash total for a specific element in the transaction set	
Syntax Notes:		<ol style="list-style-type: none"> 1 If CTT03 is present, then CTT04 is required. 2 If CTT05 is present, then CTT06 is required. 	
Semantic Notes:			
Comments:		<ol style="list-style-type: none"> 1 This segment is intended to provide hash totals to validate transaction completeness and correctness. 	

Data Element Summary

	<u>Ref.</u>	<u>Data Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use			CTT01	354 Number of Line Items Total number of line items in the transaction set <i>Enter the number of occurrences of LIN.</i>	M N0 1/6
Not Used			CTT02	347 Hash Total Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element.	O R 1/10
				Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	
Not Used			CTT03	81 Weight Numeric value of weight	O R 1/10
Not Used			CTT04	355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X ID 2/2
Not Used			CTT05	183 Volume Value of volumetric measure	O R 1/8
Not Used			CTT06	355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X ID 2/2
Not Used			CTT07	352 Description A free-form description to clarify the related data elements and their content	O AN 1/80

Segment: **SE** Transaction Set Trailer
Position: 220
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).
Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary					
	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>	
Must Use	Des.	Element	96	Number of Included Segments	M N0 1/10
	SE01			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329		Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set <i>Enter the same number cited in ST02.</i>	M AN 4/9



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